

WHAT IS CLAIMED IS:

1. A reinforced drainage grate assembly comprising:

(a) an elongate drainage grate having a substantially planar drainage surface including a plurality of apertures there through and a pair of longitudinally extending side portions, each side portion extending
5 orthogonally below said drainage surface and including a bottom flange extending toward the opposing one of said side portions;

(b) a reinforcing member disposed between said bottom flanges and an underside of said drainage surface so that an upper surface of said reinforcing member abuts said underside of said drainage surface, said
10 reinforcing member including a plurality of apertures there through, wherein at least a portion of said apertures are co-registered with at least a portion of said apertures in said drainage surface so as to permit the passage of fluids from said drainage surface through said reinforcing member, and wherein
15 said upper surface includes at least one substantially continuous longitudinal upper surface portion disposed inwardly of said the portions of said member disposed between said bottom flanges and underside and extending longitudinally from a first end of said reinforcing member to a second end of said reinforcing member.

2. The assembly of claim 1 wherein a plurality of said apertures of said reinforcing member are of substantially the same dimensions as, and co-registered with, a corresponding plurality of said apertures in said drainage surface.

3. The assembly of claim 1 wherein said reinforcing member further comprises a plurality of slots disposed therein, said slots adapted to receive a metal strip therein.

4. The assembly of claim 3 wherein at least a portion of said slots include metal strips disposed therein.

5. The assembly of claim 1 wherein said reinforcing member further comprises a plurality of slots disposed therein, said slots extending substantially perpendicular to said pair of side portions and adapted to receive a metal strip therein.

6. The assembly of claim 5 wherein at least a portion of said slots include metal strips disposed therein.

7. The assembly according to claim 1 wherein said elongate drainage grate is substantially rectangular, having a length and an inner diameter corresponding to the distance between said side portions, and at

5 least said upper surface of said reinforcing member has a length and diameter substantially the same as said length and inner diameter of said elongate drainage grate.

8. The assembly according to claim 1 wherein said reinforcing member is formed of a single piece of plastic.

9. The assembly according to claim 7 wherein said reinforcing member is formed of a single piece of plastic.

10. The assembly according to claim 1 wherein the area of said upper surface of said reinforcing member is greater than the area of said apertures in said reinforcing member.

11. The assembly according to claim 1 wherein said reinforcing member includes a plurality of apertures disposed orthogonally between said side portions of said drainage grate.

12. The assembly according to claim 1 wherein said reinforcing member includes a plurality of apertures disposed in a line substantially perpendicularly between said side portions of said drainage grate.

13. An adjustable load rating drainage grate assembly comprising:

(a) an elongate drainage grate having a substantially planar drainage surface including a plurality of apertures there through and a pair of longitudinally extending side portions, each side portion extending orthogonally below said drainage surface and including a bottom flange extending toward the opposing one of said side portions;

(b) a reinforcing member disposed between said bottom flanges and an underside of said drainage surface so that an upper surface of said reinforcing member abuts said underside of said drainage surface; said reinforcing member further including:

a plurality of apertures there through, wherein at least a portion of said apertures are co-registered with at least a portion of said apertures in said drainage surface so as to permit the passage of fluids from said drainage surface through said reinforcing member, and a plurality of slots adapted to receive at least one strip of metal therein, said slots being disposed within said reinforcing member in a manner adapted to alter said load rating of said drainage grate when a plurality of metal strips are disposed within said slots.

14. The assembly of claim 13 wherein said reinforcing member does not include any metal strips and said drainage grate has a Class A rating.

15. The assembly of claim 13 wherein a plurality of said slots include metal strips disposed therein in a manner adapted to provide said drainage grate with a Class B rating.

16. The assembly of claim 13 wherein a plurality of said slots include metal strips disposed therein in a manner adapted to provide said drainage grate with a Class C rating.

17. The assembly of claim 13 wherein a plurality of said apertures of said reinforcing member are of substantially the same dimensions as, and co-registered with, a corresponding plurality of said apertures in said drainage surface.

18. The assembly of claim 13 wherein said slots extend substantially perpendicular to said pair of side portions and adapted to receive a metal strip therein.

19. The assembly according to claim 13 wherein said elongate drainage grate is substantially rectangular, having a length and an inner diameter corresponding to the distance between said side portions, and at least said upper surface of said reinforcing member has a length and diameter substantially the same as said length and inner diameter of said elongate drainage grate.

20. The assembly according to claim 13 wherein said upper surface of said reinforcing member includes at least one substantially continuous longitudinal upper surface portion disposed inwardly of said portions of said member disposed between said bottom flanges and said underside, and extending longitudinally from a first end of said reinforcing member to a second end of said reinforcing member.

21. The assembly according to claim 13 wherein said reinforcing member is formed of a single piece of plastic.

22. The assembly according to claim 20 wherein said reinforcing member is formed of a single piece of plastic.

23. The assembly according to claim 1 wherein said reinforcing member includes at least one elongate fastening member extending orthogonally from a bottom surface thereof, said fastening member including an enlarged distal end portion.

24. The assembly according to claim 13 wherein said reinforcing member includes at least one elongate fastening member extending orthogonally from a bottom surface thereof, said fastening member including an enlarged distal end portion.